

Claims

1. Process for filling a vehicle tank with a gaseous fuel, wherein the fuel is compressed, placed in temporary storage, and expanded in the vehicle tank and wherein the fuel has a high hydrogen content, characterized in that an oil or an oil mixture is added in doses to the fuel.

2. Process according to claim 1, wherein the oil or oil mixture contains mineral oil.

3. Process according to claim 1, wherein the oil or oil mixture contains synthetic oil.

4. Process according to one of claims 1 to 3, wherein the fuel contains the hydrogen as a hydrogen molecule and/or as a hydrocarbon.

5. Process according to one of claims 1 to 4, wherein the oil or oil mixture is added so that the highest fuel pressure occurring during the filling remains below the saturation vapor pressure of the oil or a component of the oil.

6. Filling station for performing the process according to one of claims 1 to 5, with a compressor station and a high-pressure (HP) storage vessel for the gaseous fuel, characterized in that the filling station contains a dosing mechanism for oil or an oil mixture.

7. Filling station according to claim 6, wherein the dosing mechanism is upstream from the compressor station or placed between two compressor stages.